

What is claimed is:

1. A contrast media injector system comprising:
 - an injector head;
 - a contrast container holder connected with the injector head, said contrast
- 5 container holder configured to hold a contrast container in a substantially fixed position while said injector head is oriented substantially vertical.

2. The contrast media injector system according to claim 1 wherein the contrast container holder further comprises:

a support arm having a first end and a second end, said first end adapted to couple with the injector head;

5 a securing portion connected to the second end, said securing portion configured to prevent movement of the contrast container substantially in a horizontal plane and a vertical plane.

3. The contrast media injector system according to claim 2, wherein the support arm is integrally formed with the injector head.

10 4. The contrast media injector system according to claim 2, wherein the first end is removably coupled with the injector head.

5. The contrast media injector system according to claim 3, wherein said support arm further comprises:

a control portion mechanically coupled with the first end, said control portion
15 having a first position that prevents the first end from being uncoupled from the injector head and a second position that permits the first end to be uncoupled from the injector head.

6. The contrast media injector system according to claim 1, further comprising:

a syringe connected to the injector head;

a contrast container;

a fill tube coupling the syringe to the contrast container; and

5 wherein the contrast container holder is further configured to hold the
contrast container while the injector system operates to fill the syringe with a
contrast media from the contrast container.

7. The contrast injector system according to claim 1, wherein the substantially
fixed position orients the contrast container so as to be tilted toward the injector

10 head.

8. The contrast injector system according to claim 1, wherein inserting or
removing the contrast container relative to the contrast container holder can be
accomplished by an operator of the injector system using only one hand.

9. A method for performing a filling sequence in a contrast media injector system having a fill tube coupling a syringe to a contrast media, the method comprising the steps of:

expelling substantially all air from the fill tube;

- 5 thereafter, filling the syringe at a first rate wherein aeration of the contrast media is prevented, said first rate being faster than a second rate that is a maximum fill rate if air is not previously expelled from the fill tube.

10. The method according to claim 9 wherein the step of expelling includes the steps of:

drawing a first amount of contrast media into the syringe; and
expelling the first amount out of the syringe and fill tube.

5 11. The method according to claim 9, wherein the step of expelling includes expelling substantially all air from the syringe.

12. A method for changing contrast media containers during a syringe filling sequence, comprising the steps of:

pausing the syringe filling sequence of a syringe when a first contrast container is substantially emptied;

5 replacing the first contrast container with a second contrast container;

expelling substantially all air from a fill tube coupled between the syringe and the second contrast container; and

thereafter, resuming filling the syringe from the second contrast container at a first rate wherein aeration of the contrast media is prevented, said first rate

10 being faster than a second rate that is a maximum fill rate if air is not previously expelled from the fill tube.

13. The method according to claim 12 wherein the step of expelling further includes the step of:

expelling a portion of contrast media in the syringe out of the fill tube into the second contrast container.

- 5 14. The method according to claim 12, wherein the step of expelling further includes expelling substantially all air from the syringe.